

CHAOS STRIKES BACK

by FTL Games

Review by : Paul Gittins (PAC)

When I heard there would be a new Dungeon Master game I could hardly wait. I enjoyed the original DM game probably more than any other computer game I have ever played. I probably played the original DM through about 6 times. As you can see my anticipation was great. I even took a set of characters and exercised them deliberately to increase their levels as much as possible. (In the DM game you start with very low level characters and the more time they spend using their skills the more they develop.)

The target date for release of Chaos Strikes Back (CSB) was to be in time for Christmas 1988. As that time came and went I constantly looked for the release but it just was not to be. Now here it is, Dec. 1989 and only two weeks before Christmas. As always the rumors are flying but still I had seen nothing. This was to be a different day for me however. I walked into the software store and there it was in all it's glory. It didn't take long for me to make the purchase and head straight for my trusty old ST.

I had heard that you got into trouble almost immediately when this game started so I was ready. My special characters were strong, Master or Expert in nearly all skills. I sat down to the computer and began the process. First you are required to boot the Chaos Utility Disk and use this to import you characters from you DM save game. Once this is done a new CSB save game disk is required for all your CSB saves. After making these preparations *we were ready for the Dungeon.*

My palms were sweating and my throat was constricted from the excitement. My adrenaline levels were skyrocketing and little crinklings of nervous tension were running up and down my back muscles. Into the ST went the CSB disk and then in drive B goes the save game. The screen comes up with the familiar FTL logo and then goes to a huge slab of stone with a map roughly etched out on it. You may at this time either enter the prison where several characters have been frozen and left for you to select or you may resume your previous game. Since I had already made up my character set I selected the resume option and after a long wait I was greeted with the familiar "game loaded" screen.

As my audience watched from the rear I pressed the button and popped into the game. Immediately I was confronted by 3 of the ugliest golden brown worms I have ever seen. They are like the purple worms in DM with the addition of armored plates over their heads and a little red flag on the end of their tails. As any DM aficionado knows worms are poison and attack with gusto. Unfortunately all my characters were naked as jay birds and the only things they brought with them were their levels of skill and of course my knowledge and experience. Naturally I figured the poor worms didn't have a chance. Within 10 minutes I was rebooting the game because I had gotten my butt thoroughly kicked. All my people were dead and I was hopelessly addicted.

I resumed my game from the beginning and with a little fore knowledge was ready for those old worms. I made a mad dash for the sword on the floor in the center of the room and while avoiding the worms prepared a light spell and then a couple of poison cloud spells and some fireballs. The room is square or nearly so and there is a chest in the center. There are coin slots in the walls and small cubby holes which are opened when a coin is inserted. There is one obvious exit which requires the killing of a couple of worms to get to.

These FTL people are devious. To get to the exit you must pass through a door and go down a corridor. Even highly skilled people don't do too well fighting worms while naked so you have some poisoned wounds and are hurting a bit while running towards the door. Wouldn't you know there would be a hidden floor switch which immediately causes the generation of a new pair of worms.

After about 11 minutes I was beginning my third game and was a little wiser. This time I knew about the worm regeneration switch and avoided it as much as possible. I got the sword and from the chest in the room I was able to partially clothe my heroes. I ran down the corridor the there was a pit trap on the floor. A worm was pursuing me, but there was also a floor switch in front of me which momentarily closed the pit. If the timing was just right I could run from the floor switch down the corridor and across the closed pit. When I woke up and dusted myself off, (I fell into the pit) my heroes were hurt a bit but all were alive. They had to sleep a while to regain strength and let the poison from the worms wear off but were otherwise ok. As I looked around I saw there was a regeneration area in front of me and some writing on the wall to my right. Each time

I turned I saw the same thing again. The only difference was the item placed in the regenerator.

This is know as the crossroads and is where the game truly begins. From this point you can select one of the four directions and begin your search in earnest. You may select from KU (fighter), ROS (ninja), DAIN (Wizard), or NETA (Priest) pathways. The object (other than getting bashed, burned, bonked, broasted and otherwise abused) is to complete each of the four paths and along the way obtain a special element called Corbum which must then be thrown into a special FUL YA (mondo fire) pit where it is consumed.

Make no mistake about it, this game is tough! At the time of this writing I have destroyed two of the Corbum elements and completed all four of the pathways down to the Diabolical Demon Director level. There are still several puzzles left to solve and a couple of keys to find. Many of the monsters regenerate and so there is always a new surprise waiting just around the corner.

There are new monsters and old ones. I know I have killed at least 13 dragons and several of the stone golems. I have killed more of those infernal poison worms than I can count and the place is littered with rocks and boulders from the dead rock heap monsters. There are several heaps of armor from all the Deth Knights I have taken out along the way as well.

Do I like this game? You bet I do. I occasionally get up on the game roundtable on GENie to see what everyone else has to say and the new CSB section is a virtual hotbed of activity. I'm certain there have been over 300 messages uploaded in the past two weeks. You can be certain this game is a solid hit. The people at FTL have done a bangup job and deserve the heartiest congratulations. The game is very challenging and yet with persistence and skill you can win. You must save your game often and you cannot leave any stone unturned. If you are strumped you can save your game at that location and after turning off your computer you can boot up the utility disk. The utility disk that comes with CSB also contains a hint oracle which will look at your save game and give you specific or general hints about the particular puzzle you are looking at. This is a great concept and I have used and enjoyed it regularly. You can also get information about the various monsters so at least you know what that thing was that just kicked your butt all over dungeonville.

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February is a

A collage of the words "Swap Meeting" and "Don't" in various sizes and orientations, creating a dense, abstract composition. The words are scattered across the page, with "Swap Meeting" appearing multiple times in different fonts and sizes, and "Don't" appearing once in a large, bold font. The overall effect is a visual pun on the title of the book.

Don't miss it !

P.A.C.

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6:30 P.M.

Northwest Service Center

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David Moore 240-0249



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David Moore.....(503) 240-1913

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New 8-bit Software

The Wedge Ver 2.0
program by Ed Bachman
by D. Moore (PAC)

It is always great to see new software produced for the 8-bit machines, and this is no exception. This is in my opinion is what the SpartaDos Toolkit should of been. This is an addition to the already enormous selection of commands that SpartaDos has. This will add 17 more commands, or 20 if you have the MIO. After using it I found that I really miss it when it is not installed. But like every silver lining this cloud has a dark side.

This is what I found when I ran The Wedge:

REQUIREMENTS:

130XE or 130XE compatible machine
128K minumin

SpartaDOS 3.2D (some early
versions do NOTwork)

This program keeps all these new commands in the extra memory banks therefore requiring a 130 compatible machine. Also this means that programs like Basic XE "EXTEND" command will not work with The Wedge as it tries to use the same memory. Matter in fact the programmer suggests that you don't run Basic XE and The Wedge together. As for what programs it will and will not run with ? I haven't found one yet, though I am sure that there are a few laying out there.

Here is a list of the new commands and the Syntax for their usage.

COLD

Syntax: COLD [/X]

WHAT

Syntax: WHAT
[Dn: path>] filename.ext

VIEW

Syntax: View
[Dn: path>] filename.ext

READ

Syntax: READ
[Dn: path>] filename.ext

LIST

Syntax: LIST
[Dn: path>] filename.ext [/P]

COUNT

Syntax: COUNT
[Dn: path>] filename.ext

PEEK

Syntax: PEEK [hex value]

POKE

Syntax POKE [hex value]

**** WARNING ****

Certain areas of memory shouldn't be changed or your machine will lock up.

DEC

Syntax: DEC
[decimal number]

HEX

Syntax: HEX [hex number]

FIND

Syntax: FIND
[Dn:] [path] filename.ext

MOVE

Syntax: MOVE
[Dn:] [path] filename.ext
dest>dirpath> [/O]

PURGE

Syntax: PURGE
[Dn:] [Dirpath>]

RENDIR

Syntax: RENDIR
[Dn:] [path>] oldname newname

ABAT

Syntax: ABAT
[Dn:] [path>] [filename.ext]]

PCOPY

Syntax: PCOPY
D[n]:[path>][filename.ext]]
[Dn:][path>][filename.ext]] [/A]

EDIT

Syntax: EDIT
[Dn:] [path>] filename [.ext]

EXIT

Syntax: EXIT

The next set of commands work ONLY for the owners of the MIO and then if only if the MIO is operational at boot up.

MIO

Syntax: MIO
(calls the MIO main menu)

DSWAP

Syntax: DSWAP /xx
[S] [[dn: path>] [filename][.ext]]

MLOCK

Syntax: MLOCK

Well now you have the general idea of what this program is about. Like I said this is what SpartaDos Toolkit should of been and wasn't. If you would like a copy of The Wedge you will find it in 8-bit disk library in February, or you can download it from GREAT-8/Super-PAC BBS (502) 240- 0249 or from The ACUTE BBS (215)- 261- 0620



Connecting your Atari 8-bit
to the Outside World !
by D. Moore (PAC)

The are many things that the Atari 8-bit computer can do beside playing good games. We will take a look at only a few. Hopefully this will give you ideas to develope, and satisfy your needs. Your Atari can control the outside world, not just sense it.

To do all this we need "Output Port." Inside your Atari is a chip numbered 6520. also call the PIA or Peripheral Interface Adaptor. The PIA contains two 8-bit inout/output (I/O) ports and two control registers.

When selected, the PIA monitors only the first two address lines, so that it responds to every fourth address within the 54016 to 54271 range (decimal). The address 00110011 has the same low two bits as does 00000011, so the PIA responds the same to both.

It is a shame that better address decoding wasn't included. If this would of been done than, 256 bytes in this section could of had been dedicated to external devices on the parallel bus, not the complex system now necessary.

Memory addresses 54016 and 54017 are called "Port A" and "Port B", respectively. On the XL/XE computers, Port B controls the EXTENDED memory banks. Pokeing this location can really disrupt the operation of you system.

Continued on Page 3

In the older 400/800's Port B was used to control the second two joystick ports. Port A on the 400/800's works the same as on the XL/XE's. The connection is straight forward: pin 1 or plug 1 controls bit 1 of Port A and so on.

The real secret to the 6520 chip is memory location 54018 or "Port A Control." Each bit controls a specific function. When bit 2 (4 decimal) is set to 0, then you have altered the port's function from input to output.

In this condition, a 0 being written in port A sets it to input, where as a 1 sets port A to output.

Example :

10 P=Peek(54018):rem save control settings for later

20 Poke 54018,P-4:Rem sets bit #2 to 0

30 Poke 54016,255:rem sets all 8 bit to output

40 Poke 54018,P:rem restore port control

Now, instead of PEEKing inputs from the joysticks, we can control the voltage on the joystick pins by POKEing to 54016. By POKEing 54016,0 will put all pins at logic 0, while POKEing with 255 sets them all high. POKEing 54016,85 will turn on every other pin.

OKAY you say ! So what can we do with this new found power? Inputs could be any kind of switch, while the output lines can be connected to many different kinds of devices. (several examples are shown at the end of this artical). These are all simple and safe to you and the computer-if built as shown.

You can control Lamps, Steros, Motors, TV's, Beepers, and so on. One note is that power is limited to about 10 milliamperes (.01 amperes) on each pin (joystick). Several of these interface provide over 1000 volts isolation, and can be used with applications that plug directly into the wall. One last precaution: Devices that plug in should be built with care so that you can't touch places you shouldn't. If you feel uncomfortable soldering or wiring these devices seek out help of your local User Group Members.

Now that you can both detect and control things in the real world, you have new horizons for you and your Atari to explore. If you come up with something GREAT, Please share it with you User Group. I would like to know what others do with their Atari 8-bit computers. All of the componets used in the diagrams can be found at your local Radio Shack dealer. All resistors are 1/2 watt carbon, all diodes are general purpose 1004N, and the transistor is a general purpose NPN. The LED's are the cheepies that I found. Good luck and have many hours of fun exploring this world that your Atari 8-bit lives in.

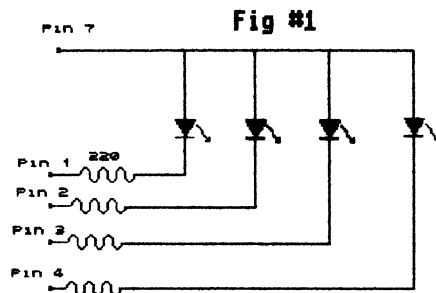


Fig #2

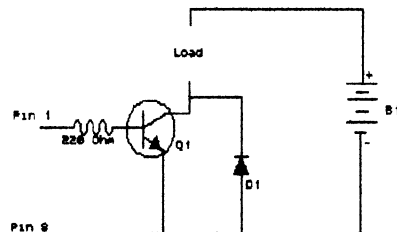


Fig #3

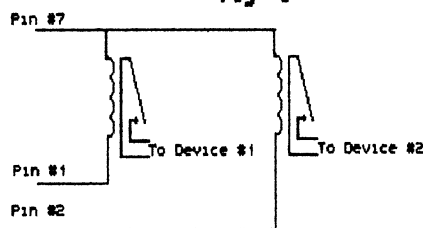
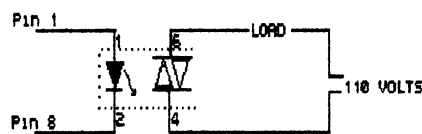
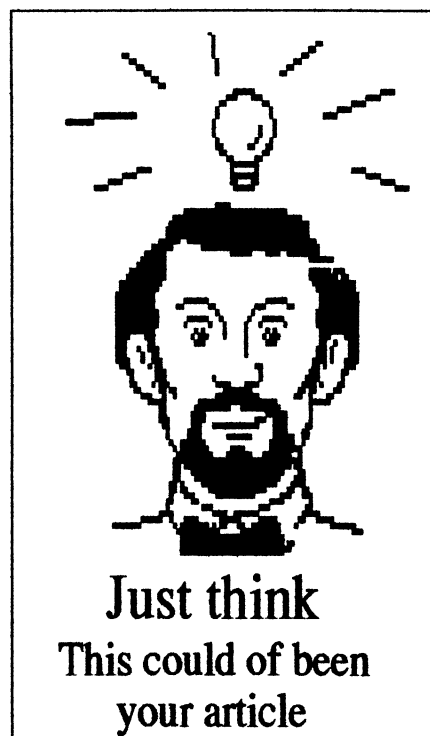


Fig #4



Due to the presents of HIGH VOLTAGE in figure #4. By all means be sure that you double check ALL your work for shorts, otherwise serious damage could occur to your Atari or yourself. PAC nor I can be held liable for any damage that may happen from misuse of the above information.



**P.A.C. HELP
HOTLINES:**

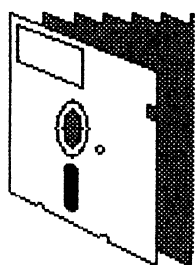
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Lightspeed C
from Clearstar
Softtechnologies. 2
double sided disks,
92 page manual.
Retail \$39.95

Review by
Gary Moyer (PAC)

C is fast becoming one of the most popular languages around. It is not only an easy language to learn but also its ease of writing and compiling make it far superior to most other high level languages. For the 8-bit user there were no real alternatives for the serious C programmer. There was Deep Blue C from the Antic catalog which did not support floating point or any of the common routines, not to mention that it was slower than a slug. But by the grace from the C. Lightspeed C contains all the statements and most the operators found in C. The package sports a 92-page manual and 2 double sided unprotected disks. The package consists of Lightspeed DOS, compiler, editor, and a ton of goodies (of which I will divulge in at the close of the review). The whole package has been implemented in Lightspeed DOS which one cannot help comparing to SpartaDOS. Although it is similar in appearance, it lacks all the nifty commands synonymous with SpartaDOS. Lightspeed DOS can handle up to four drives and one RAMdisk. It not only supports the 130xe, but also supports the Mosaic and Axlon upgrades for the 400 and 800's. But what about using Lightspeed C with SpartaDOS? YES! This, along with alot of other not too often found features, is what makes Lightspeed C such a fabulous package.

The editor.

The first thing one must understand about this package is that it is an environment. What does this mean? you can compile, link, optimize, and execute the object code all from the editor or DOS with one command line. If the compiler picks up an error it will abort the compile and load the source file into the editor displaying the error line. It will also do all this in either Lightspeed DOS or SpartaDOS. With Deep Blue C all this would be done manually. This make creating and debugging a C program a snap. Anyhow, about the editor. I would say that it resembles the editor/assembler cartridge editor. The first thing I noticed about the editor is how easy it was to use. Without even peeking at the manual I was able to stumble through a few simple operations. With the built in help menu, via the '?' key, operation was even made easier; no more digging around looking for the

manual. Another nice feature is the built in macros of commonly used statements. For example, hitting control-p gives you printf(" and control-w gives you while(. There are a total of 17 of these macros and once you become accustomed to them these become real time savers. The syntax check is another nice feature. After every line is entered, it checks for syntax errors. This can be a real time saver instead of letting the compiler find them. The editor also does replacements, file merging, searches, etc. No the editor is not a word processor like Atari Writer, but is designed specifically for creating C source code.

The compiler and linker. first a little insight into the creation of a C program. First the program is created with the editor. The program is then compiled with the compiler finally is linked, along with other linked files, to give you the object file. This might sound like alot of work, but with Lightspeed C it's a snap. The compiler, as with most all high-level compilers, can get a little fussy. I discovered that it does not like heavily nested procedure calls. Although it will compile them the results can be very humbling. Running the whole system off the RAMdisk is unbelievable. Compile and links take just a second as do editing and optimizing. If you compile a program and have not created a link file, the linker will do this automatically.

The optimizer.

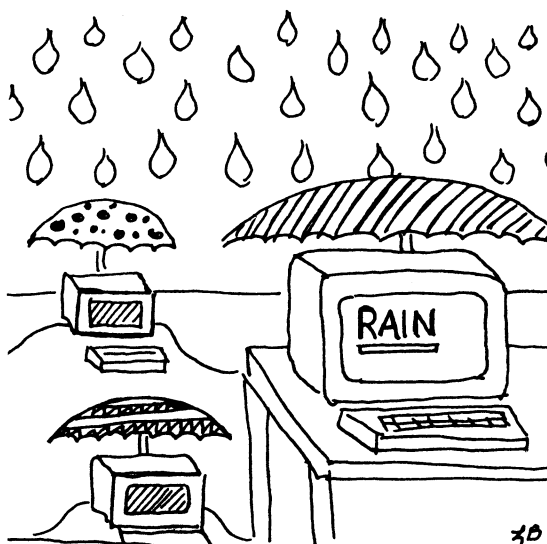
Here's another one of those little tidbits that really separates this package from the pack. The optimizer does just that, optimizes the code and produces smaller and faster (about twenty to fifty percent) running object files. The Sieve of Eratoshenes prime number benchmark had a runtime 8:40. The optimized code ran at 4:40. Thats almost a fifty percent increase in speed. Not all programs will speed up this much, but there should be an increase of atleast fifteen percent. Why not optimize and compile at one time? The optimizer can get fairly slow with large files and when a program is being developed this could waste quite a bit of time.

Some closing notes.

How about a little comparison. Megamax C for the ST did the Sieve benchmark in 2:78. Thats a little over a one and a half minute difference. No, its not as fast as the ST, but thats pretty good for a so-called "outdated" computer. The same benchmark in Deep Blue C ran at 11:15. Thats why Deep Blue C is really no comparison. Now the goodies. Also included in the package: full player/missile graphic support, floating point math, a new set of faster graphics commands (with circle, fill, etc.), SpartaDOS support,

and well written demonstrations of each. Also included are floating point routines for both Action! and MAC65 users. I could go on and on. The package is worth every bit of the price and them some. I implement the package on an upgraded 320k 65xe (courtesy David Moore) using SpartaDOS and run everything off of the RAMdisk. Is it fast? Lightning fast. Not daunting the disk user, the package runs equally impressive under the included DOS with a 1050. Although the package is full of goodies there are a few things missing. Lightspeed C does not support the following features found in Kernigan & Ritchie versions: unions, structures, and bit operators. Someone converting source code over to Lightspeed C could have some trouble in these areas, but should experience little or no other problems.

I have used just about every high-level language package available (Deep Blue C, Action!, Kyan Pascal, & Draper Pascal) for the Atari and have never found any to be as complete as Lightspeed C. For the novice to the expert, Lightspeed C is a must.



~ RAINY DAY VIDEOS ~

New Members

Lets take the time to welcome these new members to the Portland Atari Club.

Joseph and Sharon Humphrey
Stephen and Gaylene Waters
Michael T. Dunn

WELCOME to PAC

The Newest PageStream by Bill Pike (PAC)



Thanks to SoftLogik for the donation of the review copy as well as the user copy and the demo disk.

For those who have waited for a powerful, affordable, userfriendly Desk Top Publishing program that will do everything that the publisher says that it will do and a few more things as well, IT IS HERE NOW. The, fully de-bugged, PageStream version 1.8 is here. The program sells for between \$139 and \$179 depending on where you purchase it from. PageStream recommends 1 meg or more of memory. I recommend as much as you can get above 1 meg as well as a hard disk, it is very easy to get lots of font files and picture files accumulated fast and you need them all at all times (or do you?). I also strongly recommend a printer buffer 64k or bigger. This allows the printer to keep going even though the computer has gone back to "Creating Page" and speeds thing up greatly.

First of all a DTP (DeskTop Publishing) program is not a WORD PROCESSOR! If you want to create a document, first use one of the existing word processors such as Word Perfect, First Word Plus, ect. These programs will do a lot of things easier and faster than a DTP program including, my nemesis, spell checking.

The basic idea of a DeskTop Publishing Program is to put text (words) and graphics (pictures) on a page of paper so the printer can take a picture of the page and make as many copies as you wish, for a small fee of course. It is also nice to be able to move things around and maybe distort (squish, squeeze, spin, flip, and generally make a mess of the pretty text and pictures) When you are doing all this it is also nice to be able to take information, text and/or pictures, from other programs (the more different programs the better), and place them on the page with the least amount of fuss.

PageStream is able to import text in several ways. The traditional way to import text is a ASCII file, up until now. However there was one small problem. You had to go back and change things around in the text (attributes) by hand such as italicising, making Bold, making light, superscript and subscript, and underlining. An ASCII file doesn't contain this information, however a word processor document file does have this information. It is very nice when a DTP program is able to use a document file directly. As you probably have guessed PageStream does just that. PageStream can import (bring in) document files from Word Perfect, 1st Word, and Redacteur

(ok, it's popular in Europe and no you can't bring in documents from Word Writer, Timeworks has its own DTP) keeping all the attribute information. That way you have very little to change/edit. This is very nice for the poor harried news letter editor.

Another big part of DTP is the ability to import graphics (pictures, charts, ect.) taking the sections you want out of them (cropping), resizing, changing perspective, rotating, and generally making them fit on the page in a interesting (esthetic?) manner. PageStream will import, are you ready?, Degas Image, Degas Compressed, NeoChrome, Tiny, IFF, IMG, Metafile, Aegis, Encapsulated PostScript, and Macintosh Encapsulated PostScript files. I think that covers them all. All these, except for the last four types, can be imported as a object (you can't crop the picture) or as a picture window (you can take what you need and leave the rest) you can rotate, twist, stretch, squish, and generally do what ever you please with the image. Yes, you can import more than one image per page, it depends on how much memory you have. The text can also be wrapped around pictures/objects even if the shapes are irregular (not just square or rectangular) so that you can put them in a column with text. You can also use color pictures and have them rendered in Black & White or PageStream will also perform a color separation (break the pictures down to the component colors, black, yellow, cyan, and magenta printing out 4 renderings of the page, one for each color) so you can print in color if you wish.

At this point I need to define the difference between a FONT and a TYPEFACE. The term FONT implies a separate font information file for each typeface and size of letter, such as GDOS and Publisher use. The term TYPEFACE refers to a single style of letter regardless of size.

There are 10 different typefaces provided, all typefaces may have font sizes from 1/50 point (0.0002"~2/10,000 in. high) to 1310 point (18.75"~18 3/4 in. high) and any size in between. There are also around 8 or 10 typefaces available as freeware and share-ware. On top of this there are around twelve disks with 3 to 5 typefaces on each disk available from SoftLogik at a cost of around \$25 to \$30 each. This totals out to around 56 different typefaces available and more are coming out all the time. This is a much higher number than available from other programs. Each of these typefaces can be mixed and matched on a character by character basis thruout the page. These typefaces are in a outline of each letter format so you can select a fill pattern for each one, you aren't limited to black. This allows you to really get creative and sometimes have to much of a good thing if you are not careful..

Last, but by no means least, you need to be able to put your creation on paper which

means printer support, the more the better. Well, PageStream supports 216 different printer types including everything from a Star to a Lintronics Typesetter. What this means is that you have resolution from 80 dots/inch to over 2,500 dots/inch available from the program. No, you can't get 2,500 dots/inch out of a Epson FX-80, the printer won't handle it so PageStream doesn't try it. PageStream will print with the highest resolution that your printer is capable of, if you tell it to do so. SoftLogik will also provide you a driver if you don't have one of those listed. What else can I say except the higher resolution you use the slower the computer spits out the page. There is a LOT of work going on inside the computer to create each page. Yes, there is a way around this select a lower resolution when you want to print draft copies and save the hi-resolution for the final copy. PageStream also will output PostScript compatible files for those with Laser Printers as well as print-to-disk so the document can be transferred to a print shop for better resolution than your printer is capable of. The disks should be in MS/Dos format, use standard format TOS 1.4 or a program such as DCFormat which will create a standard MS/Dos format disk to save the document.

These are just the basic features there are LOTS more but I have already gone thru two sets of bandages on my fingers and I don't want to go thru a third set. So how does the program work? It works **GREAT!** That is about all I can say. I am using a 1 meg 520st with 1meg of memory, TOS 1.4, a 20 meg hard drive, a MicroStuffer printer buffer and a Epson FX-80 printer. I have not been able to make this version of the program crash, if I can't crash it no one can. There are several tutorials included with the program as well as excellent documentation. The menus are straight forward and you don't have multiple layers of icons to deal with. As you select each feature only the permitted operations are in normal the rest are in shadow text. You can have several documents in the computer at the same time and cut and paste between each. Mouse operation is smooth and accurate. The screen is totally WYSIWUG (what you see is what you get). Can I say more? You have a built in "Spelling Checker" but it is rather slow, it seems to check each word against its dictionary as it goes and the dictionary is kept on disk to conserve memory. The program will also hyphenate for you. There is also support for a full inter-national character set, if the font you are using supports it, as well as many other characters available.

Each DTP program has its strong points and its faults. One program does more but it is a lot harder to use due to having to remember what every icon does and multiple layers of icons. Another is simpler to use but it doesn't do anywhere near as much. The only thing that I could really ask for is a font editor for PageStream so you can create and modify your own fonts.

Continued on Page 6

This is supposed to be in the works.

PageStream does everything I would want it to do and for the cost is one of the best investments for anyone who wants to get into DTP. It blows away the competition even on the other computers it has been ported over to including programs costing 4 to 5 times as much. Remember you saw it first on ATARI. If you are into DTP this is the way to go. I put my money where my keyboard is. I would suggest the same for you.



PORTFOLIO

Your 8-bit Connection

In order to connect your 8-bit to the new PORTFOLIO computer, you have to know three things:

1. You have to have an RS232 interface connected to your 8-bit; the 850, P:R: CONNECTION, or MIO devices all work well for the purpose.

2. You will need a null modem cable. This is a cable which connects two computers without the need for modems (cutting out the middle man, so to speak).

3. You will need to make the null modem cable (or have a friend do it if you subscribe to the ancient Code of the Programmer); "Hey, I don't do that, it's a hardware problem!"

/// PART ONE: THE PROBLEM

The PORTFOLIO has file transfer capability... through the parallel interface. I don't know of any 8-bit application to redirect communication software into the parallel port, so ignore the File Transfer section in the SETUP application.

The RS232 ports on 8-bit computer interfaces are not compatible with "standard" RS232 DB-9 cables, (having been developed a few years before IBM stuck their foot in the PC door); pinouts are as shown below.

8-bit	STANDARD
1 DTR	1 CD
2 CD	2 RD
3 TD	3 TD
4 RD	4 DTR
5 GND	5 GND
6 DSR	6 DSR
7 RTS	7 RTS
8 CTS	8 CTS
9 (none)	9 RI

Fortunately, PORTFOLIO's Serial Interface does conform to this standard, so that modems and IBM AT cables can be used with it.

One other problem; the diagrams in the Serial Interface manual are wired wrong. If

you intend to make your own standard cables, refer to this service for the file detailing proper connections. (NOTE: this file may be found in the ST sections of this service; for CIS, GO ATARIPRO; for GENie, type ST.)

/// PART TWO: THE SOLUTION

Well, Part One ought to have scared the willies out of all but the most determined Solder-Jockies, so we can now proceed with our interface.

1. Get two (2) DB-9 "D" style connectors; one Male, one Female. (NOTE: if you don't want to go through the hassles of soldering, pick up the Radio Shack crimp-style connectors [CAT #276-1427 & 276-1428, respectively]; with these connectors, all you do is insert the wires and crimp the pins closed.)

You will also need hoods for your connections; I used the metalized hoods [276-1513] for my cable, as they offer the shielding ability of metal with the light weight of plastic.

For the cable, I recommend [278-775] double-shielded cable, especially for the MIO user; the PBI bus is flat-out full of RFI, and the chance of data corruption from that monster makes the extra cost worthwhile.

Connections are as follows:

8-bit (MALE)	PORTFOLIO (FEMALE)
+1 DTR	4 DTR→+
+2 CD	6 DSR→+
+6 DSR	1 CD (N/C)
5 GND	5 GND
3 TD	2 RD
4 RD	3 TD
+7 RTS	7 RTS→+
+8 CTS	8 CTS→+
9 (N/C)	9 RI (N/C)

Cable shield attached to PF hood **ONLY**.

Double check your connections before connecting to either computer.

To test your interface, connect the cables to their respective interfaces and fire up your favorite 8-bit term software (I've used 850 EXPRESS! and BOBTERM with equal results), and set the terminal for 300 baud, half duplex, ATARI. The ATARI mode will be important once you start binary file transfer. For PORTFOLIO, go to the RS232 option in the SETUP menu, and set 300 baud, no parity, 1 stop bit, 8 data bits, and initialize. Force the TERM mode on your 8-bit.

At the <> prompt, enter:
COPY CON AUX

Type something in to your Portfolio, press ENTER: your message from PORTFOLIO should echo on your 8-bit monitor. If not, check the term program settings, connections, and cable pinouts.

Congratulations! You now have a handheld computer that "talks" with your 8-bit Atari.



Presidents Talk

As most of you know by now the newsletter was late getting to you again! The board has taken steps to see that this *ISN'T* going to be taking place anymore. As of the February issue we have changed printers. After much discussion we have also changed formats, to something I hope is for the better. Starting with this issue you will see many new changes in the layout of the newsletter. If you have suggestions please feel free to contact me.

Due to the lack of usage on our BBS (PAC #1) we decided to discontinue it. Please make use of Super-PAC/Great-8 BBS (503) 240-0249. It is online 24 hrs and supports both the 8-bit and ST thru the TNA-Network system. It supports 300/1200/2400 baud.

For those of you that couldn't make it to the January meeting. This month had been declared as MEMBERSHIP month. We are looking to have 25 NEW members join us this month. To meet this goal we are asking for your help. For the member that brings in the most NEW members over two, PAC will buy you Dinner for two, and no this isn't going out to McDonalds or Burger King. The winning member will be announced at the March General Meeting. The last day of our membership drive is February 28th. The March General Meeting is Monday March 5th.

Untill next month
Be seeing you!



Now that I know better, I will give a couple of hints about the first room and leave you with a whetted appetite. Pick up the chest and all the coins you can find. Kill the worms if you need to and take the worm rounds for food. Once you encounter the dragons you won't need worm rounds any more, but for now they are useful. Walk around the room and bump into the wall every step of the way. There is an invisible room containing a complete set of armor which you will need. Pick up the torch and put it into the holder. This opens a corridor and exit from this room. If you are hurt you can rest for a while in the room where the armor is found but when you leave you will probably find a couple of worms waiting. Once you have killed the first couple of worms you can search the room at your leisure if you don't step on the hidden floor switch and make more of the little devils. Finally, use your coins wisely, some items can be used many times and others only once.

Now you are on your own. You probably want to know if you must own the original DM game in order to play CSB. In the most strict sense you don't, but without DM you don't have much chance. It isn't only the original documentation, it's the experience and the chance to learn the various spells and build up your heroes to their maximum potential. This game requires not only powerful heroes, but you as the player must be experienced as well.

In summary, CSB is a great game. At \$34.95 the value is excellent. I have put more hours into this game series than I ever will in any of my other game software. It is fun, exciting, challenging, and most important of all, it is winnable. I have fully enjoyed my time with this game and if it weren't for this review I would be playing it right now. One final little hint before I get back into the action. If you have access to GENie, many people have uploaded powerful character sets which you can download and use as your own if your heroes are too wimpy for your tastes.

See you in the dungeon.



The Elusive Code by D.W. Moore (PAC)

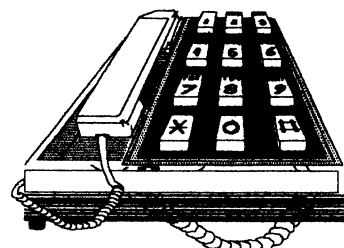
How many times have you accessed your disk drive to see on the screen "Error....138"? How about the famous "Error....170", or the "Error....144"? What do all these mean? I have even had a "Error...17" meaning the computer didn't even know what the Error was. How is that? Sure we all know that there must be a cryptic guide to these error messages that our eight bit machines gives us. Well here is your KEY to unlocking the mysteries of the Atari Error Codes.

ERROR MESSAGES

- 2..... Memory Insufficient
- 3..... Value Error
- 4..... Too many Variables
- 5..... String Length Error
- 6..... Out of Data Error
- 7..... Number greater then 32767
- 8..... Input Statement Error
- 9..... String/Array DIM Error
- 10..... Argument Stack Overflow
- 11..... Floating Point Over/Underflow Error
- 12..... Line not found
- 13..... No Matching FOR Statement
- 14..... Line to Long Error
- 15..... GOSUB or FOR line Deleted
- 16..... RETURN Error
- 17..... Garbage Error(re-boot time)
- 18..... Invalid String Character
- 19..... LOAD Program to Long
- 20..... Device number Larger
- 21..... LOAD file Error
- * 128.... BREAK Error (Abort)
- * 129.... IOCB Error (File Already Open)
- * 130.... Nonexistent Device (no such thing as Drive 10)
- * 131.... IOCB WRITE Only
- * 132.... Invalid Command
- * 133.... Device or File not Open
- * 134.... Bad IOCB Number
- * 135.... IOCB Read ONLY Error
- * 136.... EOF (End of File)
- * 137.... Truncated Record
- * 138.... Device Timeout (Drive not Present)
- * 139.... Device NAK
- * 140.... Serial Bus
- * 141.... Cursor out of Range
- * 142.... Serial Bus Data Frame Overrun
- * 143.... Serial Bus Data Frame Checksum Error
- * 144.... Device Done Error
- 145.... Read after Write Error
- * 146.... Function not Implemented
- 147.... Insufficient RAM
- * 148.... Unrecognized diskette Format
- * 150.... Directory not Found
- * 151.... File exists
- * 152.... Not a Binary File
- * 154.... Loader:Symbol not defined
- * 156.... Bad Parameter
- **158.... Out of Memory (SpartaDos ONLY)
- 160.... Drive Number Error
- * 161.... Too Many OPEN Files
- * 162.... Disk Full
- * 163.... Unrecoverable System Data I/O Error
- 164.... File Number Mismatch
- * 165.... File Name Error
- * 166.... POINT Data Length Error
- * 167.... File Locked (Can't Delete Directory)
- 168.... Command Invalid
- 169.... Directory Full
- * 170.... File not Found
- 171.... Point Invalid

* = Same as used in Atari DOS
** = Used only with SpartaDos and SpartaDos X Cartridge

Well now you have a better insight to the cryptic Atari error codes.....



Numbers to Remember

ATARI Corporation Numbers

BBS Phone Numbers 300/1200/2400 Baud
(408) 745-5308, 745-5970, 745-2642
745-4758, 745-5664

MAIN Switchboard
(408) 745-2000

Customer Relations (408) 745-2367
745-5759

Technical Support (408) 745-2004

Usergroup Support (408) 745-4743

ATARI FAX lines (408) 745-4306
745-5179

ADDRESS INFORMATION :

(408) 745-4306, 745-5179

Product Exchange:
Atari Customer Relations
390 Caribbean Drive
Sunnyvale, Ca 94088

ATARI Mail Order:
ATARI Customer Relations
P.O. Box 61657
Sunnyvale, Ca 94088

ATARI Corp. USA
1196 Borregas Ave
Sunnyvale, Calif 94088



WHERE IS IB COMPUTERS?

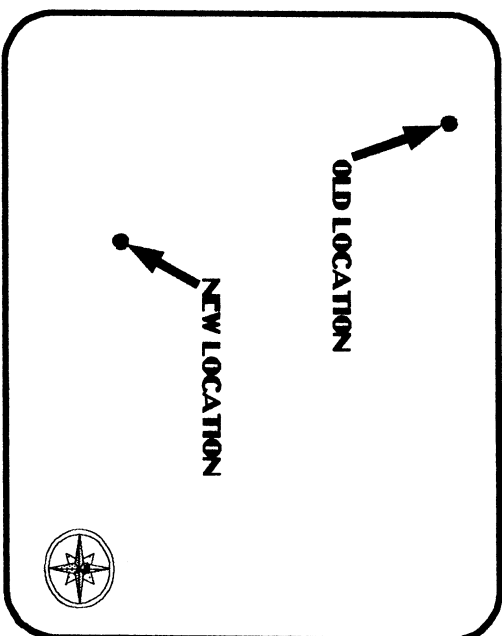
We at IB computers are thrilled to announce our new contest, the "Where is IB Computers" game. All you have to do is read this ad very carefully, checking for clues such as the simplified diagram at the right. Once you think you've found the answer, just get in your car (or on a #54 Tri-Met bus) and come see us. What is your prize? A glorious, no-expenses-paid trip to the largest selection of Atari computers and software in Oregon, for you and anyone you care to bring along. You can play as often as you want, and you win every time you play. How can you beat a deal like that?

Bloodwych 2-player Dungeon Master clone	\$49.95
General Store additive educational game	\$29.95
Red Storm Rising submarine combat in WWII	\$39.95
Batman animated adventure	\$37.95
Warlock 20-level arcade fantasy	\$29.95
Altered Beast arcade combat	\$34.95
AAARGH! Digital mayhem. Be a monster.	\$34.95
Hillfar D&D fantasy roleplaying game	\$44.95
Star Command roleplaying in space	\$44.95
Passing Shot great tennis game	\$34.95
Maniac Mansion weird Lucasfilm adventure	\$39.95
Indy Last Crusade arcade game	\$34.95
Indy Last Crusade adventure game	\$44.95
Operation: Counterstrike Falcon missions	\$21.95
Menace arcade from Europe	\$27.95
Blood Money sequel to Menace	\$34.95
Pro Soccer terrific sport simulator	\$29.95
Paperboy classic arcade	\$37.95
Maxx Yoke controller for flight simulators	\$89.95
CMI Processor Accelerator 16 Mhz for your ST	\$259.95
Vidi ST real-time frame grabber	\$189.95
DVT VCR back up your hard disk with your VCR	\$269.95
Micograph Hand Scanner with TouchUp	\$499.00
STime internal clock for 520 & 1040	\$54.95
PC-Speed FAST hardware PC emulator	\$449.95

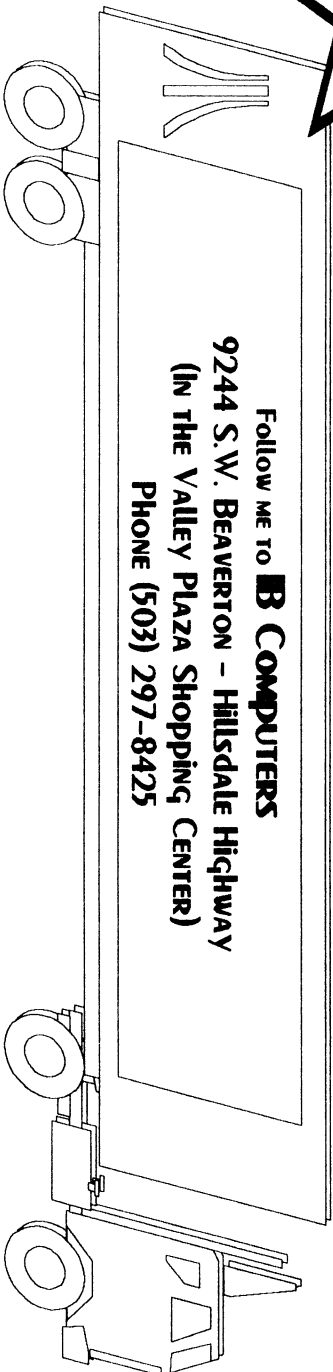
LOOK!

**WWII'S
NEW!**

FOLLOW ME TO **IB COMPUTERS**
9244 S.W. BEAVERTON - HILSDALE HIGHWAY
(IN THE VALLEY PLAZA SHOPPING CENTER)
PHONE (503) 297-8425



STORE HOURS
Monday-Saturday, 10-6
SERVICE CENTER HOURS
Tuesday-Saturday, 10-4



As this newsletter is in the making a month before it goes to print sometimes we don't get the last second news into it. But please help me WELCOME these new members to PAC !

Bob Orr
Marge Troutt
Akira Ima
Shawn Dunn
Bob and Marsha Wilkinson
Oscar and Marja Estrada
Bill and Ruth Stewart

All NEW members to PAC, also WELCOME back

Dennis Bush
Jack Smithson
Michael Smith

all renewing their memberships and also our newsletter subscriber

John Kosiorek

I for one say Thank You for joining or renewing your Membership with PAC in 1990

Attention all PAC Subscribers:

Get fast results when you want to buy, sell, or trade ATARI computer related items by placing an AD in the Classified ADS column. This is a FREE service to all PAC members. Simply send your copy to PAC in accordance with the article contributions instructions, or you upload it to the newsletter section of the BBS.
(503) 240-0249



If

it broke we can fix it
or maybe you just want
a MEMORY Upgrade
We repair both 8-bit and
the ST Atari Computer

On-Line Computers

(503) 240-1913

Readers !

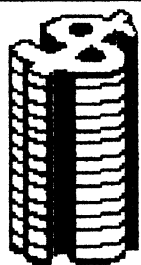
CHECK your mailing label on the back cover. If the bottom line reads "02/90" then the February issue of PAC Computer News is your last issue, unless you renew your Users Group or Newsletter membership ! To avoid a delay in receiving your Newsletter. Please renew *TODAY!*

SUPER-PAC G.R.E.A.T.-8 BBS

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~~\$1500.00~~

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Contact :

Jennifer Davis
(503) 620-5794
between 5-10 pm

We need a NEW masthead for the Newsletter. Do you have the PERFECT idea ?

It must contain :

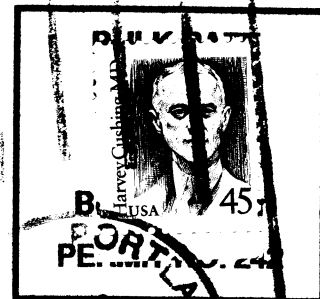
1. The Portland Atari Club
2. Computer News
3. Original Eugene ACE
4. Month and Year
5. City and State

Please mail your IDEAS to
Portland Atari Club
P.O.Box 1692
Beaverton, Or 97005
ATTN: Masthead Idea

Portland Atari Club

P.O.Box 1692
Beaverton, Or 97005

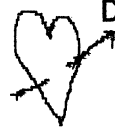
Alan Kirk
1274 Moneda Ave N.
Kierzer, Ore 97303



*** Time Dated ***

Address Correction Requested

Monthly Activities

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Membership Drive Begins For Details Call David at 240-1913	2	3
4	5 GENERAL MEETING 6:30 pm Call David for INFORMATION 240-1913	6	7	8 ST SIG Meeting For Information Call Paul at 256-4199	9	10
11	12 LINCOLN'S BIRTHDAY	13	14 VALENTINE'S DAY 	15	16	17 BOARD MEETING 7:00 pm Call David for DETAILS 240-1913
18	19 PRESIDENTS' DAY	20	21	22 ST SIG For Information Call Bill at 646-4471	23	24 8-BIT SIG For Information Call David at 240-1913
25	26	27	28 ASH WEDNESDAY			

Have some fun this year - ATTEND Your Users Group's Meetings !